

BIENNIAL REPORT
OF THE
SUPERINTENDENT
OF
PUBLIC INSTRUCTION
OF THE
STATE OF IOWA.

PRINTED BY ORDER OF THE GENERAL ASSEMBLY.

DES MOINES:
GEO. E. ROBERTS, STATE PRINTER.
1883.

To His Excellency, BUREN R. SHERMAN, Governor of Iowa:

SIR—Agreeable to chapter 159 of the Code, as amended by section 2, chapter 175, of the Nineteenth General Assembly, I have the honor to submit to you, the report of the Department of Public Instruction, for the biennial term ending June 30, 1883.

J. W. AKERS,
Superintendent of Public Instruction.

TWENTY-FIRST REGULAR REPORT
OF THE
Superintendent of Public Instruction.
1881-2.

HERETOFORE the report of the Superintendent of Public Instruction has been transmitted to the General Assembly, upon the second day of each regular session, and covered a biennial period ending September 30th.

As no corresponding change was made in the law relating to reports of county officers to this department, the statistics of this report will be understood to close September 30, 1882. Your attention is first directed to a summary of statistics collated from reports of district secretaries and treasurers; also from reports of county superintendents, together with tabulated statements showing the growth of our school system from the year 1847 to the present time.

GENERAL SUMMARY.

SECRETARIES' REPORTS.

SCHOOL DISTRICTS.

	1879.	1880.	1881.	1882.
District townships	1,140	1,162	1,161	1,170
Subdistricts	7,543	7,668	7,808	8,134
Independent districts	3,139	3,192	3,178	3,205
Whole number districts	4,279	4,354	4,339	4,375

SCHOOLS.

	1879.	1880.	1881.	1882.
Ungraded	10,457	10,590	10,741	10,751
Graded	494	498	503	518
Whole number	10,951	11,088	11,244	11,269
Average duration, months	7.35	7.40	7.40	7.1

TEACHERS.

	1879.	1880.	1881.	1882.
Males employed	7,573	7,254	6,546	6,044
Females employed	13,579	14,344	15,230	16,037
Whole number	21,152	21,598	21,776	22,081
Average monthly compensation, males	\$ 31.71	\$ 31.16	\$ 32.50	\$ 35.20
Average monthly compensation, females	26.40	26.28	27.25	27.46

SCHOLARS.

	1879.	1880.	1881.	1882.
Between the ages of five and twenty-one years, males	296,061	299,353	303,239	309,120
Between the ages of five and twenty-one years, females	281,292	287,203	291,491	295,619
Total number	577,353	586,556	594,730	604,739
Enrolled in public schools	431,317	426,057	431,513	406,947
Total average attendance	264,702	259,836	254,088	253,688
Percentage of enrollment on total enumeration	74.7	72.6	72.4	67.3
Percentage of attendance upon enrollment	61.3	60.9	58.8	62.36
Percentage of attendance upon enumeration	45.8	44.3	42.7	42.00
Average cost of tuition per month	\$ 1.49	\$ 1.56	\$ 1.62	\$ 2.10

SCHOOL-HOUSES.

	1879.	1880.	1881.	1882.
Frame	9,873	10,043	10,210	10,306
Brick	686	678	701	684
Stone	250	249	237	247
Log	72	67	73	48
Whole number	10,791	11,037	11,221	11,285
Value	\$ 9,066,145	\$ 9,243,243	\$ 9,533,493	\$ 9,949,243

APPARATUS.

	1879.	1880.	1881.	1882.
Value	\$ 170,468	\$ 189,116	\$ 205,130	\$ 211,189

DISTRICT LIBRARIES.

	1879.	1880.	1881.	1882.
Number of volumes	22,581	22,609	26,751	27,899

TREASURER'S REPORT.
SCHOOL-HOUSE FUND—RECEIPTS.

	1879.	1880.	1881.	1882.
On hand at last report	\$ 375,254.39	\$ 354,393.21	\$ 384,189.02	\$ 386,331.01
From district tax	639,238.79	575,734.31	544,631.48	631,038.25
From other sources	456,908.14	460,315.27	493,854.34	467,717.36
Total receipts.....	\$ 1,471,401.32	\$ 1,390,442.79	\$ 1,422,674.84	\$ 1,485,094.62

EXPENDITURES.

	1879.	1880.	1881.	1882.
For school-houses and sites.....	\$ 469,842.85	\$ 426,520.53	\$ 435,118.75	\$ 648,080.62
For libraries and apparatus	11,713.06	16,253.03	13,358.71	10,833.53
On bonds and interest.....	483,014.19	437,205.93	421,856.67	283,391.61
Paid for other purposes	142,124.87	127,513.39	163,780.60	180,359.14
On hand	364,706.35	382,949.91	388,560.11	362,429.72
Total expenditures.....	\$ 1,471,401.32	\$ 1,390,442.70	\$ 1,422,674.84	\$ 1,485,094.62

CONTINGENT FUND—RECEIPTS.

	1879.	1880.	1881.	1882.
On hand at last report	\$ 474,457.06	\$ 533,274.62	\$ 525,474.23	\$ 465,782.64
From district tax	927,272.13	849,626.36	861,639.95	980,392.66
From other sources	90,507.17	71,099.16	93,477.47	122,654.57
Total receipts.....	\$ 1,492,236.36	\$ 1,453,970.14	\$ 1,480,591.65	\$ 1,568,829.87

EXPENDITURES.

	1879.	1880.	1881.	1882.
For rent and repairs of school-houses.....	\$ 185,148.52	\$ 190,720.16	\$ 202,742.50	\$ 249,256.15
For fuel.....	237,322.35	229,016.91	290,847.11	304,891.73
Paid secretaries and treasurers	103,084.87	102,815.60	105,060.65	107,295.07
For records, dictionaries, etc.....	28,010.82	33,384.67	26,805.51	32,805.84
For insurance and janitors.....		98,635.43	106,910.93	114,964.47
For supplies, brooms, chalk, etc.....		51,458.29	56,293.60	66,340.05
For other purposes.....	401,285.60	227,627.65	220,192.16	262,120.07
On hand.....	537,384.20	520,311.43	471,739.10	431,156.49
Total expenditures.....	\$ 1,492,236.36	\$ 1,453,970.14	\$ 1,480,591.65	\$ 1,568,829.87

TEACHERS' FUND—RECEIPTS.

	1879.	1880.	1881.	1882.
On hand at last report.....	\$ 1,591,029.50	\$ 1,758,004.37	\$ 1,867,489.19	\$ 1,765,271.83
From district tax.....	2,347,143.18	2,279,110.99	2,243,365.51	2,451,231.84
From semi-annual apportionments	706,450.51	705,790.54	687,810.38	675,959.32
From other sources.....	115,522.46	98,966.66	81,244.47	115,155.50
Total receipts.....	\$ 4,760,145.65	\$ 4,841,872.56	\$ 4,879,909.55	\$ 5,007,628.49

EXPENDITURES.

	1879.	1880.	1881.	1882.
Paid teachers.....	\$ 2,927,308.01	\$ 2,901,948.43	\$ 3,040,715.82	\$ 3,218,320.10
Paid for other purposes.....	62,623.70	78,148.47	46,136.39	79,600.93
On hand.....	1,770,213.94	1,861,775.66	1,793,057.34	1,709,707.46
Total expenditures.....	\$ 4,760,145.65	\$ 4,841,872.56	\$ 4,879,909.55	\$ 5,007,628.49

PERMANENT SCHOOL FUND.

	1879.	1880.	1881.	1882.
Amount September 30th.....	\$ 3,484,411.18	\$.....	\$ 3,547,123.82	\$ 3,681,432.75
Interest on the same.....	276,218.88	282,902.48	234,622.40	225,997.40

COUNTY SUPERVISION.

EXAMINATION OF TEACHERS.

	1879.	1880.	1881.	1882.
Professional certificates issued.....	207	225	266	313
First grade certificates issued.....	6,541	5,888	6,364	6,754
Second grade certificates issued.....	9,263	8,676	9,121	9,342
Third grade certificates issued.....	2,911	2,966	2,803	2,997
Total number issued.....	18,922	17,755	18,524	19,406
Applicants rejected.....	2,760	2,656	2,092	2,468
Total number examined.....	21,682	20,411	20,616	21,874
Certificates revoked.....	15	15	5	6
Average age of applicants.....	22.93	22.90	23.25	22.5
No experience in teaching.....	3,029	2,680	2,756	2,944
taught less than one year.....	2,961	2,777	3,123	3,431
Teachers with State certificates.....	38	35	9	24

VISITATION OF SCHOOLS.

	1879.	1880.	1881.	1882.
Schools visited.....	10,620	9,396	9,776	9,456
Visits made during the year.....	15,374	12,645	13,889	12,578
Educational meeting held.....	529	425	480	462

APPEALS.

	1879.	1880.	1881.	1882.
Number of cases.....	101	93	107	82

COMPENSATION.

	1879.	1880.	1881.	1882.
Total paid superintendents.....	\$ 78,129	\$ 66,616	\$ 79,498	\$ 70,041.04
Average received per annum.....	789	673	811	704

PRIVATE SCHOOLS.

	1879.	1880.	1881.	1882.
Number.....	154	129	137	119
Teachers employed.....	493	474	522	573
Scholars in attendance.....	13,698	12,724	15,098	14,686

TEACHERS' NORMAL INSTITUTES.

GENERAL REPORT.

	1879.	1880.	1881.	1882.
Number of institutes held.....	99	99	98	99
Continuing weeks.....	3.08	3.08	3.06	3
Males in attendance.....	3,240	2,847	2,389	2,086
Females in attendance.....	8,711	9,226	8,992	10,146
Total.....	11,951	12,073	11,381	12,232

FINANCIAL REPORT.

RECEIPTS.

	1879.	1880.	1881.	1882.
On hand at last report.....	\$ 9,419.02	\$ 11,420.85	\$ 12,893.89	\$ 12,247.85
Examination fees.....	20,295.00	21,620.00	20,924.00	21,307.00
Registration fees.....	*11,746.00	12,073.00	11,381.00	12,226.00
State appropriation.....	4,950.00	4,950.00	4,900.00	4,950.00
County appropriation.....	197. 0	348.95	305.39	979.65
From other sources.....	206.89	681.33	552.67	.....
Total receipts.....	\$ 46,813.91	\$ 51,103.13	\$ 50,956.95	\$ 51,710.50

* The balance, \$205, was remitted in Benton county to those who had formerly contributed.

EXPENDITURES.

	1879.	1880.	1881.	1882.
For instructions and lectures.....	\$ 30,109.51	\$ 32,407.01	\$ 32,486.48	\$ 34,080.13
For incidentals.....	5,274.55	5,802.23	6,215.47	5,838.45
On hand.....	11,429.85	12,893.89	12,255.00	11,791.92
Totals.....	\$ 46,813.91	\$ 51,103.13	\$ 50,956.95	\$ 51,710.50

TABULAR EXHIBIT: SHOWING THE GROWTH OF THE PUBLIC

YEAR.	DISTRICTS.			SCHOOLS.		TEACHERS.				PUPILS.					
	District townships.	Independent districts.	Subdistricts.	Ungraded.	Graded.	Months. Days.	Av. annual session.	N u m b e r employed.		A v e r a g e com pen- sation per month.		Number of persons be- tween the ages of 5 and 21 years.	Number enrolled in public schools.	Total average attend- ance.	Average cost of tuition per month.
								Males.	Females.	Males.	Females.				
1847....	.....	416	.....	.....	.....	.....	.....	101	23	15.43	8.20	20,922	2,439	.....	.....
1848....	.....	693	.....	105	.....	.....	.....	101	23	15.43	8.20	40,646	7,077	.....	.....
1849....	.....	1,005	.....	554	.....	4 4	.....	336	245	14.53	7.64	50,082	17,350	.....	.....
1850....	.....	1,262	.....	914	.....	3 10	.....	549	260	14.76	8.78	64,336	24,804	.....	.....
1851....	.....	1,358	.....	1,181	.....	.....	.....	706	432	.....	.....	77,154	33,040	.....	.....
1852....	.....	1,560	.....	1,266	.....	.....	.....	806	525	.....	.....	85,000	33,033	.....	.....
1853....	.....	1,761	.....	1,379	.....	3 12	.....	740	599	.....	.....	100,083	42,442	24,559	.....
1854....	.....	2,353	.....	1,520	.....	3 9	.....	961	772	19.61	9.39	111,093	44,115	.....	.....
1855....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1856....	.....	2,850	.....	2,153	.....	.....	.....	1,279	1,243	14.47	8.23	173,868	59,014	.....	.....
1857....	.....	3,265	.....	2,708	.....	.....	.....	1,572	1,424	24.38	12.95	195,285	79,670	.....	.....
1858....	932	4,109	.....	2,200	.....	.....	.....	1,118	1,682	25.33	9.42	233,927	36,574	.....	.....
1859....	993	4,574	.....	4,243	.....	.....	.....	2,901	2,364	27.68	17.16	240,531	142,849	79,411	1.10
1860....	1,013	4,655	.....	4,927	.....	.....	.....	3,219	3,155	23.75	15.28	244,938	167,869	77,113	1.06
1861....	1,073	4,803	.....	5,502	.....	.....	.....	3,763	3,562	24.24	16.20	262,570	183,318	101,893	1.10
1862....	1,015	5,057	.....	5,895	.....	.....	.....	3,618	4,187	21.76	14.24	269,522	201,805	100,041	1.02
1863....	1,129	5,172	.....	6,237	.....	4 2	.....	2,937	5,563	22.00	15.68	281,733	199,750	111,185	1.10
1864....	1,141	5,340	.....	6,623	.....	5 5	.....	2,815	6,140	25.12	17.60	294,912	210,569	117,378	1.12
1865....	1,171	5,572	.....	5,732	.....	5 5	.....	2,353	6,467	31.64	22.80	324,338	217,593	119,593	1.36
1866....	1,195	5,926	.....	5,900	.....	5 4	.....	2,673	6,670	33.60	23.76	348,498	241,827	136,174	1.52
1867....	1,321	6,168	.....	6,229	.....	5 6	.....	3,676	6,667	35.88	24.64	372,969	257,281	148,620	1.37
1868....	1,412	6,410	.....	6,439	212	6 6	.....	4,123	6,846	35.42	25.72	393,630	279,907	160,773	1.32
1869....	1,462	6,773	.....	6,788	221	6 12	.....	4,479	7,515	36.96	27.16	418,168	296,138	178,329	1.34
1870....	1,476	334	6,986	6,919	213	6 4	.....	4,909	7,806	35.60	26.80	431,134	320,803	202,246	1.32
1871....	1,260	344	7,716	7,823	289	6 10	.....	5,483	8,587	36.00	27.80	460,629	341,938	211,562	1.52
1872....	1,317	400	8,438	8,156	403	6 10	.....	5,901	9,320	36.00	28.66	475,499	340,789	214,905	1.48
1873....	1,266	1,270	7,814	8,397	419	6 10	.....	6,091	10,193	36.28	27.68	491,344	347,572	204,204	1.35
1874....	1,195	2,026	7,316	8,797	375	6 14	.....	6,273	10,729	35.95	27.67	506,385	367,095	215,656	2.31
1875....	1,134	2,536	7,062	9,203	407	6 16	.....	6,500	11,645	36.68	28.34	533,571	384,012	225,415	2.32
1876....	1,099	2,933	7,017	9,454	405	6 16	.....	6,830	12,222	37.27	28.09	553,920	398,825	229,315	2.29
1877....	1,086	3,138	7,015	9,948	407	7 5	.....	7,348	12,518	34.28	28.69	567,859	421,163	251,372	1.62
1878....	1,119	3,117	7,266	10,218	483	7 6	.....	7,561	13,023	33.98	27.84	575,474	428,362	256,913	1.60
1879....	1,140	3,139	7,543	10,457	494	7 7	.....	7,573	13,579	31.71	26.40	577,353	431,317	264,702	1.49
1880....	1,162	3,192	7,668	10,590	498	7 8	.....	7,254	14,344	31.16	26.28	586,556	426,057	250,836	1.56
1881....	1,161	3,178	7,808	10,741	503	7 8	.....	6,546	15,230	32.50	27.25	594,730	431,513	254,088	1.62
1882....	1,170	3,205	8,134	10,751	.....	7 2	.....	6,046	16,037	35.20	27.46	604,739	406,947	253,688	2.21

SCHOOL SYSTEM OF IOWA FROM 1847 TO 1882 INCLUSIVE.

SCHOOL-HOUSES.						Libraries.		EXPENDITURES.						PERMANENT SCHOOL FUND.		
NUMBER.				Total.	Value.	No. Volumes.	No. Teachers' Institutes held.	Teachers' salaries.	School-houses, grounds, libraries, and apparatus.	Fuel and other contingencies.	Total.	Amount.	Annual interest.	YEAR.		
Frame.	Brick.	Stone.	Log.													
.....	.....	.....	.....	\$	\$	.....	.....	\$	\$	\$	\$	\$	\$	1847
1349	35	3	.....	387	38,506	180	.....	24,648	18,278	1,812	44,738	51,819	2,185	1848
1470	48	4	.....	522	68,762	287	.....	36,814	30,955	3,450	71,219	68,969	6,138	1849
1504	49	4	.....	557	63,412	476	.....	47,502	25,779	3,475	76,756	106,290	17,028	1850
245	74	14	471	804	99,708	703	.....	54,643	18,822	4,425	77,890	177,740	23,546	1851	
297	91	12	459	859	144,977	943	.....	72,095	31,800	3,730	107,625	.....	20,600	1852
1897	98	9	.....	1005	170,564	576	.....	87,817	30,224	3,924	121,965	907,582	36,186	1853
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50,155	1854
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68,796	1855
1139	156	38	.....	1333	205,799	875	.....	147,862	128,437	15,442	291,741	.....	102,718	1856
936	168	47	535	1686	571,064	623	.....	198,142	147,167	19,206	364,515	2,030,544	111,839	1857	
1330	175	48	629	2182	971,004	249	22	148,574	98,719	51,181	298,474	.....	103,966	1858	
1481	230	65	844	2620	1,049,747	627	16	383,589	166,802	67,241	617,632	2,303,675	115,035	1859		
1982	274	76	876	3208	1,206,840	2325	34	445,468	258,291	52,179	655,938	.....	142,151	1860	
2199	301	86	893	3479	1,288,837	2995	43	518,591	134,903	40,953	694,447	2,382,729	140,427	1861		
2514	315	99	847	3676	1,290,288	3888	44	515,939	130,805	49,027	704,771	.....	155,217	1862	
2830	332	111	837	4110	1,394,738	3857	62	570,115	160,253	58,289	788,657	2,355,523	123,766	1863		
2965	345	198	766	4274	1,739,131	4840	63	686,672	199,690	78,029	964,291	.....	135,329	1864	
3271	370	198	796	4635	2,183,738	6389	60	856,725	297,453	111,489	1,265,667	2,353,647	138,840	1865		
3766	382	103	698	5009	2,836,757	10334	69	1,006,623	572,593	158,739	1,737,955	.....	165,344	1866	
4200	436	106	612	5454	3,450,978	9303	67	1,161,653	692,034	185,910	2,039,597	2,557,107	177,791	1867		
4708	464	229	605	6000	4,307,944	8776	65	1,330,823	917,604	415,484	2,663,911	.....	201,403	1868	
5192	527	229	499	6407	5,374,542	8932	74	1,438,964	941,884	406,186	3,146,034	2,932,620	204,004	1869		
5748	550	234	356	6888	6,191,633	11399	78	1,636,951	1,038,404	378,065	3,043,420	.....	238,356	1870	
6469	600	247	282	7508	6,868,910	11482	78	1,900,893	1,035,617	432,680	3,269,190	3,191,483	226,111	1871		
7122	626	257	248	8253	7,495,926	11633	85	2,130,047	1,212,722	722,897	4,065,666	.....	249,077	1872	
7782	635	259	180	8856	8,161,956	12944	84	2,248,676	1,184,083	796,695	4,229,454	3,294,743	275,789	1873		
8158	649	268	153	9228	8,232,935	10719	92	2,447,430	1,154,745	832,646	4,443,482	.....	304,836	1874	
8400	650	259	121	9528	8,687,933	13120	97	2,598,440	1,114,684	892,626	4,605,749	3,363,961	318,997	1875		
8885	651	264	108	9908	9,375,833	17122	98	2,784,009	1,168,057	1,005,618	4,957,774	.....	283,021	1876	
9279	671	257	89	10296	9,044,973	17329	99	2,953,045	1,106,788	1,136,995	5,197,428	3,462,000	276,960	1877		
9596	680	244	76	10566	9,161,701	20587	99	3,011,230	1,101,956	990,213	5,103,399	.....	284,013	1878	
9783	686	250	72	10791	9,066,145	22581	99	2,927,308	1,149,718	979,452	5,051,478	3,484,411	276,218	1879		
10043	678	249	67	11037	9,243,243	22609	99	2,901,948	1,231,598	787,709	4,921,249	.....	282,903	1880	
10210	701	237	73	11221	9,533,493	26751	98	3,040,716	1,263,663	825,441	5,129,820	3,547,124	234,622	1881		
10306	684	247	48	11285	9,949,243	27899	99	3,218,320	940,776	1,398,963	5,558,259	3,681,432	225,997	1882		

STATEMENT OF LOSSES

To the school funds of the State by deficits in reports of district officers for the nine years, commencing 1873.

1873.			
ON HAND.	TEACHERS' FUND.	SCHOOL-HOUSE.	CONTINGENT.
Close of 1872.....\$	691,747.37	\$ 333,234.76	\$ 241,644.47
Beginning of 1873.....	664,591.91	282,860.27	238,592.48
Deficit.....	27,155.46	50,374.49	3,051.99
1874.			
Close of 1873.....	916,816.93	361,327.51	288,757.75
Beginning of 1874.....	882,553.31	345,561.34	273,995.78
Deficit.....	34,263.62	15,763.17	14,761.97
1875.			
Close of 1874.....	1,198,005.77	374,465.68	227,952.75
Beginning of 1875.....	1,133,314.03	346,366.22	322,191.97
Deficit.....	64,691.74	28,099.46	5,760.78
1876.			
Close of 1875.....	1,419,597.01	439,044.22	373,960.14
Beginning of 1876.....	1,318,157.11	414,041.28	358,143.76
Deficit.....	101,439.90	25,002.94	15,816.38
1877.			
Close of 1876.....	1,442,295.32	435,661.33	384,975.20
Beginning of 1877.....	1,413,745.15	409,950.62	388,855.61
Deficit.....	28,550.17	25,710.71	Excess. 3,880.41
1878.			
Close of 1877.....	1,501,949.57	436,412.89	425,791.88
Beginning of 1877.....	1,515,960.66	420,420.79	418,478.99
Excess.....	14,011.09	15,992.00	Deficit. 7,312.89

1879.			
Close of 1878.....	1,611,410.30	389,456.15	485,536.94
Beginning of 1879.....	1,591,029.50	375,254.39	474,457.06
Deficit.....	20,380.80	14,201.76	11,079.88
1880.			
Close of 1879.....	1,770,213.94	364,706.35	537,384.20
Beginning of 1880.....	1,758,004.37	354,393.21	533,274.62
Deficit.....	12,209.57	10,313.14	4,109.58
1881.			
Close of 1880.....	1,861,775.66	382,949.91	520,311.43
Beginning of 1881.....	1,867,489.19	384,189.02	525,474.23
Excess.....	5,713.53	1,239.51	5,162.80
1882.			
Close of 1881.....	1,793,057.34	388,560.11	471,739.10
Beginning of 1882.....	1,765,271.83	386,339.01	465,782.64
Deficit.....	27,785.51	2,221.10	5,956.46

It is a pleasant duty to direct official and public attention to the growth and present prosperous condition of education in our State.

In the year 1848 we had but 105 school buildings, 124 teachers, and 40,646 pupils of school age. By reference to statistics which are presented in this report, it will be seen that we have 11,285 school-houses, 22,081 teachers, 604,739 school children. In this same year we expended \$14,885 for all purposes connected with education. For the year closing September, 1882, we disbursed for school purposes, \$5,007,628.49

Were it possible to estimate the improved character, and value of instruction at present as compared with that early date, the result would be still more gratifying and astounding. To know that this has not resulted from causes that are temporary, but rather that it has been a natural and vigorous growth, is all that is needed, as a ground of faith in the future of our public schools.

So far as may be known at present, there is no disposition to take any backward steps in the educational policy of our State. On the contrary, the interest is constantly growing. There is an earnest and aggressive spirit everywhere moving the people to accomplish all that is possible in the way of better accommodations and more adequate facilities.

There may have been a time when our people were inclined to be a little vainglorious and boastful of our excellent provisions for the education of our children, and at the same time to rest content when a commodious and elegant house had been built and furnished, taking for granted that this being done, the benefits and blessings of a good education were assured to their children. Experience is fast teaching us that good school-houses do not necessarily mean good schools, and that good and well

TRAINED TEACHERS

are as necessary and indispensable as good and well-furnished houses.

We are beginning to demand satisfactory results, and naturally to give more attention to the selection and employment of teachers. There is, therefore, a very marked change in public sentiment in favor of normal training schools.

This is seen in the disposition to establish training depart-

ments, in connection with local high schools and academies, as well as in the numerous petitions from various sections of the State, asking for State normal schools. A number of such propositions were presented to the Nineteenth General Assembly, it being stipulated, in most cases, that spacious grounds and a suitable building should be provided, and the same donated to the State, on condition that it should be organized and equipped at public expense, and adopted as a State normal school. It is highly important that such a sentiment be fostered and encouraged, for however much may be accomplished in the way of suitable buildings and appliances, however broad and comprehensive may be our plans for education, everything must finally depend upon the character and fitness of those who are employed to teach. All these are but the body, while the teacher must be the living moving spirit. We hear much of natural teachers. It is very frequently asserted that teachers are born, not made. Natural gift is of the greatest importance; but it is equally true that those who are successful in the highest degree, in any calling, are born with faculties which specially fit them for their chosen work, and yet there is no profession that is content to rest on natural bent or adaptation alone. On the contrary, the naturally gifted are required to supplement and enlarge their talents by long and patient application before they are entitled to public recognition and approval. Teachers should not be exempted from the operation of this rule. Preparation for this work implies much more than is commonly understood. Teaching is a science peculiar and particular.

It is a great mistake to suppose that those who are young in years, with little experience and no special training, are competent to teach and govern, however well qualified by nature they may be. We need good training schools, to the end that any one who desires to enter the profession of teaching may have suitable opportunity to obtain the necessary preparation for its arduous and responsible duties.

This would not only insure better teachers, but would add from two to three years to the age of the average beginner, insuring mature judgment and increased strength in all respects. Errors in connection with the government and management of schools would largely disappear; increased confidence on the part of parents, and a more cordial relation between the people and the schools would be sure to follow.

It has been a matter of surprise and disappointment that our people

have failed to avail themselves of the opportunities afforded by our law, to establish township and

COUNTY HIGH SCHOOLS.

In many counties there are no colleges, academies, nor high schools for the accommodation of young people of the county who desire to fit themselves for teaching, and about all the preparation they obtain, they get at the common district schools. Such counties are often supplied with teachers from a roving class who have no special inducements to stay at home, and who are too often encouraged to go away.

Better teachers might be made of the boys and girls of such counties, if there could be established for their benefit such schools as we now have at Panora, in Guthrie county. Quite a number of unsuccessful attempts have been made in various counties to establish county high schools, but owing to petty jealousies and general short sightedness, nothing has been accomplished. It is to be hoped that such laudable and worthy efforts will be more successful in future.

As a rule our schools are good just in proportion as our people are willing to pay for them.

Houses, furniture, apparatus, if they are what they should be, are all expensive, and the districts that fail to pay good prices for teachers, must suffer a decline in the efficiency of their schools.

The schools of many of our towns and cities have been personally visited and inspected. In the great majority of cases they are in excellent condition, and seem to be in a fair way to improve. This is especially true of those schools over which a good principal or superintendent has been retained for a term of years.

That a man or a woman may bring a system of schools to a high standard of perfection, it is necessary that he thoroughly know and understand them, and the people whom he serves. This is too often lost sight of, and changes are made every year or two, to the detriment of the schools.

One system of organization is but fairly introduced when a new man is employed, which means new plans and methods, which in turn are scarcely well understood by subordinate teachers, parents and pupils, when a stranger is called in to overturn what has been done, and inaugurate something new and different. Many think that unless radical changes are made and the old order of things reversed, they will be thought to lack individuality and fitness for the place.

A somewhat careful examination of courses of study as used in our graded schools, has disclosed the fact that very marked changes have taken place during the past few years. There is now a conspicuous absence of the higher mathematics, grammar, latin and French languages, logic, mental and moral science.

The tendency everywhere is to lower the grade of academic work, to the end that something more practical may be introduced and taught in the schools. In many instances these branches are sacrificed as a compromise measure, and to placate and quiet a class of people who have very narrow ideas as to what constitutes a good English education. They would discard all the foreign languages, and many of the sciences are considered purely ornamental.

As a rule, that class which demands that the schools shall confine themselves to that which is practical, hold that reading, writing, spelling and arithmetic constitutes a good and sufficient education. There are no more practical studies than philosophy, chemistry, geology, physiology, civil government, higher mathematics, and ancient and modern history. The latin and German languages constitute a broad field of culture as necessary to a good practical education as many of those branches which represent the lowest rudiments of learning. So necessary and important are these higher branches of education, that any system of mental training is incomplete without them. We should lose no time nor spare no effort to arrest the unwise policy of putting them beyond the reach of our high school pupils.

I think that the great demand for something more practical in education, grows out of the mistaken idea that "practical" means mechanical.

The term "industrial training" would probably more nearly express what is commonly meant by a practical education. It is doubtful whether this term, as used, is always understood. It is most generally employed by those who deprecate the fact that our people are losing respect for labor and think that our schools should do something to cure this defect of our civilization. The fact that industry may be mental, or of such a character as to demand principally the use of the educated faculties of the mind, is overlooked by those who charge that education is doing nothing in the interest of labor.

It ought to be understood that the schools as now conducted, are subserving the interests of all industries. To do this it is not at all

necessary that schools should be converted into work shops and factories. While it must be granted that there is a scarcity of skilled workmen, and that it would be a blessing to many young men and women if they could have the necessary training to make them such, there is something more important. There is a scarcity of educated workmen.

In view of modern co-operative societies, trades unions and other schemes for uniting and unifying laboring men, it is all important that we should seek to control them by education. To this end it is necessary that intelligence and that wise spirit of moderation, reason and discretion which comes of education should rule in all their councils. This will not only render them safer as citizens, but more skillful, more reliable, more temperate, more industrious, and, therefore, more productive and valuable to society, than the illiterate, though skillful, laborer.

As a rule, educated persons master trades, and acquire skill much more rapidly than those not educated. This is the universal testimony of men who employ large numbers and are in positions to estimate them correctly upon their comparative merits.

Our schools promote the interests of all industries; for the reason that educated persons, as a rule, seek employment. I grant they may be more particular as to what kind of work they do. I think it quite probable that many educated young people have false notions as to the gentility of certain kinds of labor, and the baseness of others. Society everywhere teaches this baneful lesson, and those who disregard it must pay the penalty of being denied recognition.

What can our schools do to correct this error?

If it were the result of ignorance, and if the nobility and dignity of labor, and the laboring poor, had not been taught faithfully in our schools from their earliest existence, we might hope to modify public sentiment in this regard; but I am free to say that in my judgment any material departure from our present system, with this end in view, would be a fruitless attempt.

It is urged that we need more mechanics, and our boys, as now educated, decline to enter these useful and honorable walks of life. This may be true, but if it is, it is due to other causes than those usually assigned. They choose other occupations or professions because they pay better. They are able to command a higher price in some line of work which affords opportunity to employ their educated and cultured talents.

Those who insist that the schools should so teach and train their pupils as that they may be able to earn an honest living and become useful citizens, and members of society should not complain at this.

That we are educating a nation of proud idlers is not supported by the facts. Comparatively few of those who have passed through our high schools are out of employment. The great majority of them become speedily engaged in business and are always found among the best and most successful classes of our people.

Indeed, they are in much too great a hurry to enter business. It would be infinitely wiser and better if education were still further prosecuted in connection with some one of our many excellent higher institutions of learning.

Just what should be done as a public measure to increase the number of skilled workmen and to incline all people to industry, is a problem that must sooner or later be solved. The agitation of this question will grow until we shall be drawn into experiments, designed to improve on our present system of common school education.

I am well satisfied that in a system charged with the general education of the people, very little can ever be done in this direction. Special schools may do much, and indeed are doing much to satisfy any reasonable demand for industrial education. Our agricultural colleges, of which we have so fine an example in our own State, are already occupying a large place in the broad field of inquiry and experiment. These schools are well attended, well equipped for technical teaching, and are exerting vast influence and accomplishing great good. In addition to these schools, aided by the generosity of the nation, we have many eminent schools for scientific instruction, some of them munificently endowed, whose aim it is to impart instruction in special branches by means of evening classes and courses of lectures.

The great Cooper Institute, of New York, and the Wagner Institute, of Philadelphia, are fine examples of such schools. We need more of them, and no class of men will more heartily rejoice in a large increase in their number, than those most deeply interested in the welfare of common school education. Should there be an organized effort, the result of public or private enterprise, in behalf of such schools and such training, they will most heartily co-operate. These industrial schools, and, as they are sometimes called, "apprenticeship schools," are becoming very numerous in some of the older countries, and they may be said to have grappled in earnest with the great prob-

lem. In order to modify their entire system, reaching their district schools as well as those of the cities, it has been determined to open a series of schools for the training of masters, teachers, and foremen. This means that one and the same set of teachers are to be required to impart text-book instruction during a portion of each day, and for the remainder thereof to give technical instruction in the shop or work-room to be connected with the school. When it was determined to do this, a difficulty presented itself. Where could teachers be found who could successfully teach a school of this character? The result was the establishment of the schools to which I have referred.

The outcome will undoubtedly be that technical instruction will, in time, encroach upon the academical work, and education come to mean learning a trade. It would be folly to attempt such a system in this country.

In monarchical governments, and possibly in a republic, where everything is indoctrinated with their influence, it may do to aim chiefly at making a skilled workman of a subject. We must educate in view of the relation which every one sustains to the whole.

Every man who is a citizen under our form of government exercises some of the prerogatives of a ruler. It is impossible to forecast the future of those for whose education and training we provide. The poor and obscure boy of whom we would make a hewer of wood or a carrier of water, may come to be the chief executive of the nation. He should be educated, then, in view of his possibilities. Not in the narrow sense of personal advantage, but in the highest interests of the nation at large.

At the same time his education should be such as to enable him, in the shortest possible time, and in the most efficient manner, to master any particular branch of industry, to which he may desire to turn his attention. To this end, our present system of education can be, no doubt, improved.

We should give more attention to drawing. There is scarcely an occupation in which a thorough knowledge of the subject would not be of great practical value.

We should give more attention to exhibits of work done and articles made by school children. This work may be done, and, indeed, should be done, out of the school room, except where it relates to studies taught, as, for instance, map drawing, diagraming, or abstracting, which may, and probably should, be done under direction of the teacher.

In short, we should do anything and everything in the interests of industry and technical training, which can be done without interfering with the regular work of our schools. Whatever does conflict with that work, however valuable and necessary it may appear to be, as a preparation for any special industry, should be promptly discontinued.

DISTRICT ORGANIZATION.

My predecessors have called attention to the numerous and serious objections to our present system of district organization. It is in the hope that you will call the attention of the general assembly to this important subject that I re-state at some length, the many arguments that have been advanced against our independent and subdistrict plan, and in favor of the district township system.

Hon. Horace Mann, in referring to the same subject in connection with the report of the Massachusetts Board of Education, said: "I consider the law of 1789, authorizing towns (townships) to divide themselves into districts, the most unfortunate law on the subject of common schools ever enacted in the State. During the last few years several townships have abolished their districts, and assumed the administration of the schools in their corporate capacity; I learn from the reports of school committees, and from other sources, that many other townships are contemplating the same thing." Hon. Thomas H. Benton, in his excellent report, dated December 2, 1850, in reviewing this subject said: "For myself, I think our congressional townships (six miles square) none too large for school districts."

The general assembly, by an act dated July 14, 1856, appointed a commission, consisting of Horace Mann, Amos Dean, and Mr. Bissell, to revise the school laws of the State.

The small district system had already obtained a firm hold upon our people, and the commissioners labored hard to displace it, but were at last compelled to compromise by dividing the district township into subdistricts. But in submitting their report they enter a powerful and unanswerable protest against subdivision, and in favor of making the township the unit.

I desire here to review their arguments in the light of our experience covering a period of twenty-five years. The following is quoted from their report:

"Your commissioners, however, feel bound to say that they have presented this organization simply in reference to the existing state of things. Their own settled convictions are, that the whole district system as stated in the bill should be promptly discontinued, and that of making each civil township a district, substituted in its place. The following are some of the reasons which have led to this conviction:"

1. *It facilitates and greatly simplifies the organization of districts.*

The correspondence of the department concerning the organization of districts is very heavy, and constantly on the increase. The law is so complex and contradictory that explanations and official opinions are necessary in almost every case, to inform the people what they may do and how it should be done. At best many mistakes are made. Districts are illegally organized, resulting in litigation, to the injury of the cause of education.

2. *It gives fewer occasions for controversies relative to boundaries.*

The law now requires that boundaries of district townships shall coincide with civil township lines, but in many counties this law is frequently disregarded, and there is constant disputing as to just where the line is. In many cases the old school district boundaries remain unchanged and where the old records are lost, and there is no map as the law requires, it is impossible to settle disputes, except as these cases come up on appeal or are taken into the courts. Since the independent town district may extend in disregard of township lines, the notion obtains that it is not required that district township lines be so limited.

If it were understood that a civil township is the only rural school district known to the law, that simple declaration would avoid all trouble of this character.

6. *It equalizes among a large community the burdens imposed in the erection, repairs, and outfit of school houses, offers much greater facilities and inducements to establish district libraries and to sustain and increase them.*

It frequently occurs that portions of the township are thinly settled, and the character of the land is such that a reasonable tax will not sustain a good school. While the law now provides that a tax to build in any particular subdistrict, may be levied upon the township at large, it also provides that the township electors may refuse to allow the tax asked for, and in that case it must be levied on the sub-

district asking for aid. The effect of this is to make subdistricts cautious and guarded in asking for levies, lest the whole burden may be thrown back upon themselves. They therefore ask for just as small a sum as will possibly serve to build a small house, and provide equipments, that will barely answer to their necessities. Subdistricts are too often jealous of each other, lest one should receive more than its share of public funds.

In the case of rural independent districts, the situation is even worse. Many weak subdistricts have been forced into independent organizations against their will, and however poor they may be, or however unable to provide a good school, they must accept the inevitable and do the best they can.

The opposite is true of those districts which have been favored by nature, and are competent to provide excellent schools.

The theory of our school system is that all children are entitled to, and shall receive, equal school privileges; but this unfortunate system of district organization defeats it in practice.

8. *It annihilates and forever, the possibility of cutting up a population into small districts, to which the district system so frequently leads.*

Our experience has verified the correctness of this statement. Four sections of land, without regard to value, now generally constitutes a school district, and districts of but two sections are quite numerous. If this unwise policy of creating small districts continues, it is not difficult to see what the result will be. Small and inadequate houses, poorly paid teachers, and therefore inferior schools. The different and successive steps of progress in this mistaken and unwise policy of making small and numerous districts are as follows:

In 1858 the general assembly enacted a law providing that cities or incorporated towns with contiguous territory might become independent districts by vote of the electors. Two years later this privilege was further extended to unincorporated towns of three hundred inhabitants.

In 1866 it was again extended to subdistricts containing not less than two hundred inhabitants. The bad consequences of this last provision was so readily seen, that it was promptly repealed two years later. It was then hoped that a step had been taken toward a return to the larger district system, but unwise counsels prevailed against an unbroken array of testimony from the ablest educators of the

State and nation, that small districts were objectionable from almost every possible stand point.

In 1872 the general assembly passed an act enabling the subdistricts of a district township to become independent districts by a majority vote of the township electors. As has been before stated it happened that many subdistricts were made independent, which had voted against such separate organization. The proposition prevailed in the township, and they were forced to submit. From April, 1872, to September, 1875, the number of independent districts increased by more than one thousand.

The report of the Superintendent for 1881, shows their number to have reached 3,178. Fortunately this tendency to increase the number of districts received a decided check, by an amendment passed by the Sixteenth General Assembly, which repealed the statute permitting subdistricts to become independent.

Had the formation of these districts been allowed to go on, as they had from 1872 to 1875, we should have had no less than six or seven thousand independent districts at the present time.

10. *It leads to the erection of more commodious school-houses, with larger accommodations and means of instruction.*

Were all school-houses the property of the district township in which they are located, there would not be so great a disposition to cut the levies to so small a figure. All would feel a common interest and a common pride in every building and all its equipments. A better class of teachers would be attracted and retained.

12. *It offers facilities for classifying those of different ages and attainments, and of employing different grades of teachers in their instruction.*

Our law now provides for township high schools; but so far very few have been established, and they have not met with flattering success. So long as the districts of the township are practically separated in all their interests and affairs, and absolutely so in the independent rural districts, nothing will come of this most excellent provision. With the district township system the central high school would naturally and speedily follow. It may not be a high school, but at least a school of higher grade, with better classification in all schools of the township.

Here the older boys and girls could attend from all parts of the

township, and the younger children the primary schools in their immediate locality.

This would be a long step toward the solution of the vexed question of grading the district schools, a problem upon which the ablest educators have worked for years, and that, too, without making any very marked advance.

It would also open the way for a much needed system of

TOWNSHIP SUPERVISION,

designed to supplement and strengthen the efficient labors of our county superintendents.

A united township could afford to pay a salary that would secure a teacher of much more than average ability and attainments. This teacher might be given a supervisory power over the schools and teachers of the township. He might be charged with the responsibility of preparing a course of study, and of seeing to it, in some degree, that it was carried out in each school.

To do this it would not be necessary that he be required to visit schools, as classes could be brought to the central school for competitive examinations, etc. He should hold regular teachers meetings, all the teachers of the township being required to attend.

Frequent exhibits of school work would also be a valuable feature of this system. I am free to say that in my judgment this plan would increase by one hundred per cent the efficiency of the average district school. It would greatly reduce the number of district secretaries, and be the means of saving a vast sum of money annually. By reference to our financial report, it will be seen that we paid to these officers, \$107,295.07, for the term ending September 20, 1882. A large saving in the item of salaries would not be the only benefit that would result. The number of such officers would be so largely reduced that better and more competent men could be selected to discharge the duties of these important offices. We have lost, or at least are unable to account for a great deal of money, owing to the incompetency or carelessness of men whose duty it has been to receive and disburse the school fund of the State. For the past ten years this sum of money—lost or unaccounted for, reached, in round numbers, the enormous sum of one-half million dollars.

These are some of the unanswerable arguments against the district, and in favor of the civil, township as the unit. It is a remarkable

fact that the small district plan of organization has grown and fastened itself upon us, against the uniform recommendations and the strenuous efforts of every man who has stood at the head of educational interests of our State to prevent it. I deem it not improper to submit here for your consideration and convenience the opinions and utterances of these able and worthy men, in the hope that their great unanimity and weight may at last secure for them the attention to which they are entitled, and in the further hope that they may serve to arrest the further continuation of that system of disintegration, which has already greatly impaired the usefulness and retarded the progress of our schools.

In 1857 Hon. Marturin L. Fisher, then Superintendent of Public Instruction, in speaking of district organization, said: "The tendency of the present system is to multiply districts so far that they contain but a small number of scholars, and, of course, receive but a small portion of the school money. The consequence of this is that in many districts no school is kept, and in a greater number it is kept for so short a time as to be almost useless. If each township form one school district, under charge of a competent committee, they could establish as many schools in different parts of the township as the inhabitants need, and provide for the continuance of schools for the same length of time, thereby affording equal opportunities to all the children of the township to obtain an education."

Hon. Thos. H. Benton, who succeeded Mr. Fisher, says: "It is to be regretted that the early educators and legislators of the country ever incorporated the feature of small districts into their common school system. The precedent established by them has obtained so firm a hold on the public mind that none of those who have succeeded them are willing to assume the responsibility of departing materially from it. It is too complicated to be readily understood and administered, and consequently leads first to confusion and discord, and ultimately to neglect and indifference among the people of the district."

Hon. D. Franklin Wells says: "The advantages of the district township system are so numerous and apparent that prominent educators in other States where it has not yet been introduced are laboring earnestly for its adoption."

He might have added that in States where it has been adopted, notably in Ohio, Massachusetts, Pennsylvania, and Indiana, it is so strong with the people that nothing could induce them to go back to

the district plan. I quote from the report of Massachusetts State Board of Education for 1872. The school committee of Perue say: "We congratulate our citizens upon their refusal to return to the old district system. In the judgment of your committee, to have done so would have been to advance backward, and the present is not the age for retrograde movements in any matter pertaining to our educational interests."

Hon. A. S. Kissell, speaking of subdistricts, says: "A large majority of the most active friends of education in Iowa, have always insisted that a serious mistake was made in the incorporation of the subdistrict feature into the district township system; that if each civil township had been made a simple, single district, to be governed by a board of directors, to be chosen at large in the district, as in independent districts, and provision made for but one annual meeting of the electors, instead of two, much better results might have been looked for, and better satisfaction given." His objections to rural independent districts are so tersely and forcibly stated as to warrant me in quoting them at some length. He says: "It will increase the number of school districts to eight or nine thousand,"

He estimated very much too low. We already have more than *twelve thousand*.

"2d. It will greatly increase the number of school officers required to manage our school interests. If the system should be inaugurated throughout the State under the present law, the number would be increased from less than ten thousand under the old system to more than twenty-six thousand additional school officers. Such increase in the number of districts, and diminution in their size, would tend to the election of inefficient and careless officers, who neither possess the ability to perform the duties properly, nor sufficient interest to make the attempt.

"4th. To pay the additional secretaries and treasurers twenty dollars each, the average salary now paid, would cost the State three hundred and twenty thousand dollars a year, being nearly one-tenth of our present total expenditures for school purposes.

"5th. In parcelling out the school funds into so many hands there will be greater liability to mismanagement and loss, more danger of misapplication of public funds, and less chance to detect it.

"6th. It will largely increase the labors of county auditors and county treasurers, in making out tax lists, and accounting for taxes.

"7th. It will increase the difficulty and expense of securing the annual statistics, and make them less reliable.

"8th. It will produce endless strife and contention in the adjustment of boundary lines.

"9th. It will increase the evil of favoritism in the selection of teachers.

"10th. It will prevent the formation of township, union and graded schools.

"11th. It will multiply the text-book evil in the matter of uniformity between districts.

"12th. It will greatly increase the inequality of taxation for school purposes, usually placing the heavier burden of tax upon the poorer districts and poorer people."

The recommendation of Gov. Samuel Merrill to the General Assembly, printed in connection with the report of the department in 1874, is as follows:

"I cordially commend to your consideration the forcible remarks of the Superintendent of Public Instruction, upon the subdistrict system, and unite with him in urging its abolition. I am fully persuaded that the school districts should be substantially co-extensive with the civil townships, incorporated towns, and cities; in other words, that there should not be district territorial organizations, other than those well defined political divisions with which we, in common with the people of most of the States, are so familiar. The system of subdistricts as it prevails in Iowa, is peculiar to this State, and was adopted as a compromise between the small district plan formerly in vogue, and the more modern one of township organization now so generally adopted throughout the north.

"In my opinion, it has lasted long enough to establish the superiority of the system whose adoption it impedes, and to furnish another illustration of the general inutility of compromises in establishing anything permanent."

Hon. Alonzo Abernethy presented the evils of the district system to several general assemblies, and very ably advocated the adoption of the township plan, and accomplished much by way of checking, at least temporarily, the creation of rural independent districts; but his labors in this behalf have been neutralized by the unfortunate provision that independent districts may subdivide, to form one or more independent districts. After giving a complete resume of the sub-

ject, he says: "My own convictions, strengthened by the observations of another two years, are that the township district system recommended by Horace Mann, in 1856, should have been adopted; that the system recommended by the Code commissioners, and by the school committees of both branches of the general assembly in 1873, was far better than the present law, and that the adoption of that system now would best subserve the school interests of the State."

Hon. C. W. von Coelln also took an active and honorable part of what has been an united and earnest endeavor to convince the law-making powers that a change in our plan of organization is imperatively demanded.

As has been remarked, this matter has been again and again urged upon the general assembly, for the past twenty-five years.

Every statement made by educational men has been verified, and it should not be thought necessary to offer further argument, to convince any rational person that the mistakes of the early years of our history, with relation to district organization, should now be corrected.

I would therefore recommend that all district townships be constituted school districts, with boundaries coincident with civil township lines, except, in case of natural obstacles, as now provided for under Sec. 1797, S. L. 1880.

The subdistrict feature should be dropped entirely.

Incorporated towns of five hundred inhabitants, and all cities, should be made independent districts, with at least four sections of land. The boundaries of such independent districts, as should be created in future, should be established by the board of the school district from which they are taken.

It is admitted that this would be a radical change; but a radical change is needed. It would meet with opposition at first, but would soon commend itself to the people and be by them heartily approved.

Two years might be given in which to effect the new organizations, which, however, might be done at any time. In furtherance of this plan of simplifying the school law some action should be taken toward the consolidation of

SCHOOL FUNDS.

The three fund system is too complex and troublesome. The law

is not generally observed. Borrowing from one fund for the benefit of another is indiscriminately practiced; and in many districts a candidate for the office of treasurer is required to pledge himself to violate the law in this regard or fail of election.

Many treasurers are unable to keep the necessary accounts with the three separate funds, and the result is endless confusion and trouble.

By the united effort of the county superintendents, and other county officers, reports can be made that appear well, but in many instances they are extremely inaccurate.

If all moneys were included in one or at most two funds it would greatly simplify reports, and render them much more accurate. It would also diminish the labor and annoyance of county officials, and lift a great burden from the State department.

COMPULSORY EDUCATION.

This subject has received a great deal of attention in our State, and there seems to be a public sentiment in favor of a compulsory law. While I would not cast any obstacles in the way of an experiment, I am compelled to say that in my judgment we have little to hope for in this direction.

To render such a law effectual, or any more than a dead letter, it would be necessary to strengthen it with efficient police regulations, which, however reasonable and necessary, would be very distasteful to our people. No doubt much good would result in towns and cities were a compulsory law enacted and enforced by truant laws, and other stringent penal regulations, designed to secure regularity of attendance. It has always seemed reasonable to me that the apportionment of the interest on the permanent school fund should be apportioned on the average daily attendance, rather than on entire enrollment. This would operate to create a competition between school districts, which would exert a direct and powerful influence to fill our schools from the ranks of vagrant children now allowed to frequent the streets and alleys of our towns, while the State pays liberally for their education.

It would make a distinction in favor of those localities where the greatest attention is given to education, and in my judgment would accomplish more good than any compulsory law we could enforce.

NORMAL INSTITUTES.

These short schools, while they are by no means all that is needed

for the training of teachers, have been the means of accomplishing a great deal to improve our schools, and to raise the grade of our teachers.

They are held, as a rule, during the summer months, and continue from two to four weeks. The course of study prepared by a committee appointed several years ago by the State Teachers' Association is quite generally used. The result is that there is a good degree of uniformity in the work throughout the State. The fact that so many young men and women are fitting themselves for institute conductors has had an excellent influence upon all the schools of the State.

Within the past few years we have given more attention to didactics than in the earlier years of these schools. This is as it should be, and it is to be hoped that in time they will come to be in a still larger and higher sense, *normal schools*, having for their first aim the teaching of methods of instruction and general school management.

COURSE OF STUDY FOR NORMAL INSTITUTES OF 1880.

The course of study, for 1880, together with the excellent suggestions of the committee appointed to prepare it, are herewith republished, for the benefit of county superintendents, who desire to continue the plan therein laid down.

To County Superintendents:

The committee having charge this year of the preparation of a course of study, consisting of Supt. D. W. Lewis, of Washington, Supt. W. W. Speer, of Marshall county, and the Superintendent of Public Instruction, have thought best to give county superintendents the opportunity to choose their own course of study, with such suggestions to them as are herein made.

We recommend the course of study in didactics prepared for the normal institutes of 1877, which will be found in the biennial report of the Superintendent of Public Instruction for 1876-77, a copy of which will be sent you.

A general outline in history has been prepared by Mr. Lewis of the committee, from which you may choose such portion as is most adapted to your county. Supt. Speer has prepared a pretty full outline of physical geography, which might be used profitably in place of the ordinary course in geography. His brief outlines in geology and astronomy are intended to furnish teachers with the elements of these sciences, if they are sufficiently advanced to make good use of such preparation in the school room. Some elementary text-books on these subjects should be used in connection with these outlines.

It is advisable that you print such parts of the course of study as you wish to use in your institutes, and place a copy in the hands of each teacher.

The former outlines have been used at too great an extent as a skeleton merely, and too little work has been done to bring out the facts which really constitute the body of the subjects under consideration. Our advice, therefore, is to take but a limited portion of the outline on any subject, and insist upon full details and proper methods of instruction.

General suggestions, with regard to programme, course of study, and other matters of interest, are found in the course of study for 1877.

C. W. VON COELLN,	} Committee.
D. W. LEWIS,	
W. W. SPEER.	

DES MOINES, May 15, 1880.

UNITED STATES HISTORY.

I. THE ABORIGINES.

- A. The Mound Builders.
- B. The Indians: 1, their government; 2, religion; 3, civilization; 4, character; 5, present condition.

II. PERIOD OF DISCOVERY AND EXPLORATION.

- A. The Spanish.
 - B. The French.
 - C. The Dutch.
 - D. The English.
- Who, what, where, when, and why, for each.*

III. THE COLONIAL PERIOD.

- A. St. Augustine.
 - B. Port Royal.
 - C. Quebec.
 - D. Thirteen English colonies.
- Who, where, when, and why, regarding the settlement of each, with a brief history of subsequent events.*

IV. THE KIND OF GOVERNMENT.

- A. Charter.
- B. Proprietary.
- C. Royal.

V. THE COLONIAL.

- A. Claybornes's Rebellion.
 - B. Pequod War.
 - C. Maryland Civil War.
 - D. King Phillip's War.
 - E. Bacon's Rebellion.
 - F. King William's War.
 - G. Queen Anne's War.
 - H. Oglethorpe's War.
 - I. King George's War.
 - J. French and Indian Wars.
- Causes, events, results, and a few dates of each.*

VI. PERIOD OF THE REVOLUTION.

- A. Causes: 1, remote; 2, immediate.
- B. Events: 1, military; 2, political.
- C. Actors.
- D. Results.
- E. Principal dates.

VII. CONSTITUTIONAL PERIOD.

- A. Weakness of the Confederation.
- B. Convention to amend Articles of Confederation.
- C. Constitution adopted and ratified.
- D. Provisions of the Constitution; *three departments in the government, why:* 1, legislative department: *a*, congress, two houses, *why:* (*a*), number of members in each; (*b*), qualifications; (*c*), how chosen; (*d*), term; (*e*) compensation; (*f*), privileges; (*g*), quorum; (*h*), vacancies, and how filled; (*i*), officers of each house; (*j*), powers of each house; (*k*), powers of congress; (*l*), prohibitions on congress; (*m*), prohibitions

- on the states; 2, *executive* department: *a*, the president; (*a*), qualifications; (*b*), how chosen; (*c*), term; (*d*), compensation; (*e*), duties and powers; (*f*), impeachment and trial; (*g*), vacancy; *b*, the vice-president: (*a*), qualifications, etc., as for president; *c*, the cabinet: (*a*), how constituted, etc., as for president, with names of present incumbents; 3, *judicial* department: *a*, courts: (*a*), district; (*b*), circuit; (*c*), supreme; (*d*), how each is constituted; (*e*), jurisdiction of each; (*b*) judges, (*a*), how appointed; (*b*), number; (*a*), term; (*d*), compensation; (*e*), present judges of the supreme court.
- E. Amendments to the Constitution: 1, how proposed; 2, how ratified.
- F. Administrations, in order: 1, political principles and parties; 2, candidates and the election; 3, important events, domestic and international; *a*, military; *b*, political; *c*, industrial; *d*, commercial; *e*, social; 4, leading statesmen; 5, principal dates.
- G. National progress: 1, territory; 2, population; 3, resources; 4, wealth; 5, education; 6, inventions; 7, social condition; 8, international influence.

PHYSICAL GEOGRAPHY.

I. THE EARTH.

- A. Shape: 1, deviation from a perfect sphere: *a*, produced how; *b*, proves what.
- B. Movements: 1, rotary motion: *a*, direction; *b*, resulting measure of time; *c*, velocity of motion; 2, revolution around the sun: *a*, direction; *b*, measure of time; *c*, velocity of motion.
- C. Circles and surface measurements: 1, circles of position: *a*, geographical use of the term circles; *b*, great circles: (*a*), equator; (*b*), meridians; *c*, parallels; 2, climatic circles: *a*, parallels: (*a*), tropics: (1), definition; (2), reason for position; (*b*), polar circles: (1), definition; (2), reason for position; *b*, ecliptic: (*a*), definition; (*b*), what it marks; (*c*), relation to tropics and equator; 3, latitude: *a*, definition; *b*, number of degrees; *c*, length of degrees, with what variations; 4, longitude: *a*, definition; *b*, number of degrees; *c*, length of degrees at equator, and how varying.
- D. Temperature: 1, evidence of internal heat: *a*, thermal springs: (*a*), situation and temperature; (*b*), number of; (*c*), where most numerous; *b*, geysers: (*a*), how explained; (*b*), where found; (*c*), character of water; (*d*), to what due; *c*, observations in mines: (*a*), how made; (*b*), mean annual temperature, where found; (*c*), observations, where made; (*d*), results; *d*, conclusions from observations: (*a*), temperature at 9,000 feet; (*b*), temperature at thirty miles; (*c*), probable thickness of earth's crust; (*d*), conclusions, how sustained.

II. THE AIR.

- A. As an element; 1, its composition and elasticity; 2, its weight and pressure; 3, its density and height.
- B. Circulation of the air: 1, winds: *a*, definition; *b*, classes; 2, general currents: *a*, zone of minimum density; *b*, movement of air toward this zone; *c*, movement of air from this zone; *d*, currents resulting; 3, direction of currents: *a*, direction in absence of disturbing causes; *b*, effects of the rotation of

- the earth; *c*, direction of polar currents; *d*, direction of return currents; 4, wind zones: *a*, number; *b*, names and position.
- C. Humidity of the air: 1, evaporation: *a*, process; *b*, capacity of the air for absorbing vapor; *c*, dry air and moist air, and the change from one to the other; 2, dew, mists, and fogs: *a*, definition; *b*, variations in temperature when observed.
- D. Condensation of vapor: 1, causes: *a*, usually due to what; *b*, effect of passage of warm winds to cold regions; *c*, effect of passage of cold winds to warm regions; 2, influence of unevenness of surface: *a*, condensation near mountain chains; *b*, condensation on plateaus; *c*, influence of deserts; *d*, influence of forests.
- E. Distribution of clouds and rain: 1, laws: *a*, of annual average rain-fall; *b*, of cloudiness and rainy days; *c*, variation from coast to interior; 2, rain zones: *a*, causes and character of tropical rains; *b*, causes and character of rains in middle and cold regions; 3, snow: *a*, temperature of atmosphere when formed; *b*, form and size of snow-flakes; *c*, manner of formation of hail.

III. THE WATERS.

- A. As an element: 1, its relations to organic life; 2, composition of water.
- B. Rivers: 1, sources: *a*, definition of springs; *b*, explanation of intermittent springs; *c*, situation of most springs; 2, amount of water: *a*, depends on what; *b*, influence of forests; 3, agency or rivers: *a*, transportation; *b*, other uses; 4, deposit: *a*, how varying; *b*, deltas; 5, rapids, and cataracts.
- C. Lakes: 1, mountain lakes: *a*, characteristics; *b*, examples; 2, lakes in plains: *a*, characteristics; *b*, great lakes of the globe; 3, salt lakes: *a*, characteristics; *b*, cause of saltiness; 4, distribution of lakes: *a*, where most numerous; *b*, lakes of Europe, Asia, North America and Africa.
- D. Sea water: 1, composition; 2, temperature; 3, marine life: *a*, vegetable; *b*, animal; 4, oceanic movements and their causes; 5, waves: *a*, description; *b*, cause; 6, tides: *a*, description; *b*, difference between waves and tides; *c*, phases; (*a*), flood; (*b*), ebb; *d*, interval between tides; 7, causes of tides: *a*, comparative influence of moon and sun; *b*, production of tidal wave under moon; *c*, production of tidal wave on other side of the globe; 8, currents: *a*, definition; *b*, extent; *c*, cause; 9, kinds of currents: *a*, cold; *b*, warm; *c*, results of their meeting; 10, direction of currents: *a*, in absence of modifying influences; *b*, explanation of direction of polar currents; *c*, explanation of direction of return currents.

GEOLOGY.

- I. INTRODUCTION.
- II. DIFFERENT KINDS OF STONE.
- III. WHAT STONES HAVE TO TELL US.
- IV. SEDIMENTARY ROCKS.
 - A. What sediment is.
 - B. How gravel, sand, and mud are made.
 - C. How gravel, sand, and mud become sedimentary rocks.
 - D. How the remains of plants and animals come to be found in sedimentary rocks.
 - E. A quarry and its lessons.
- V. ORGANIC ROCKS, OR ROCKS FORMED OF THE REMAINS OF PLANTS AND ANIMALS.
 - A. Rocks formed mainly of the remains of plants.
 - B. Rocks formed mainly of the remains of animals.
- VI. IGNEOUS ROCKS.
 - A. What igneous rocks are.
 - B. Where igneous rocks come from.
- VII. THE CRUST OF THE EARTH.
 - A. Proofs that parts of the crust have been pushed up.
 - B. Proofs that parts of the crust have sunk down.
 - C. Proofs that the rocks of the earth's crust have been tilted, crumpled and broken.
 - D. Origin of mountains.
 - E. How the rocks of the crust tell the history of the earth.
- VIII. CONCLUSIONS.

ASTRONOMY.

- I. THE EARTH AND ITS MOTIONS.
- II. THE MOON AND ITS MOTIONS.
- III. THE OTHER PLANETS.
- IV. THE SUN.
- V. THE STARS AND NEBULÆ.
- VI. CELESTIAL MEASUREMENTS.

GRADED COURSE OF STUDY FOR IOWA NORMAL INSTITUTES FOR 1881.

The committee appointed by the State Teachers' Association to prepare a graded four years' course of study for normal institutes, met at Cedar Rapids, March 18 and 19, and prepared the annexed course, with the following suggestions:

The end in view in establishing these institutes was to remedy the defects in school work and increase the efficiency of the public school system. These defects may be grouped into the following classes:

1. Deficiency of scholarship among teachers.
2. Defective methods of teaching.
3. Lack of organization and system.
4. Imperfect supervision.

It is evident that the first three:

SCHOLARSHIP, METHODS, AND ORGANIZATION,

are legitimately included in institute work. It is also evident that the average time given to institute work is too short to secure the desired improvement of the teachers in any of these respects. It follows, therefore, that institutes are of value, not so much for the work done in them, as for the work induced *during the entire year* under their guidance and control.

To secure the desired ends the following suggestions are made:

The instruction given in the institute should be determined by the defects discovered in the various institutes of the State.

It is expected that the teachers will prepare the work which they will have to take up the next year, in the accompanying course, at home, under the directions and by the suggestions of the county superintendent and institute conductors. These suggestions and directions should be so minute, in topics and references, that none need be mistaken.

All who complete any year's work and sustain a satisfactory examination on it, should receive certificates admitting them to the next year's work.

The examination, instruction, and work done, should be as nearly uniform throughout the State as is practicable.

Though the examinations required by law before the county superintendents should not be based upon the exact work done in the institute, in determining the grade of a teacher's certificate, the county superintendent should take into consideration the grade and standing of the teacher in the institute course.

County superintendents desiring full outlines in the studies named will find them in the reports of the Superintendent of Public Instruction for 1878 and 1880, copies of which will be furnished on application.

GRADED COURSE OF STUDY.

FIRST YEAR.	SECOND YEAR.	THIRD YEAR.	FOURTH YEAR.
Mathematics. Fundamental Rules of Arithmetic, Factoring, Divisors and Multiples, Common and Decimal Fractions.	Compound Numbers, including Comparative Tables and Longitude and Time, Percentage.	Applications of percentage, Ratio and Proportion, Involution and Evolution, Progression and Mensuration.	Elementary Algebra.
Language. Reading and Orthography, with Dictionary Work.	1. Reading and Orthography, with Dictionary Work. 2. Etymology and Syntax.	English Analysis.	United States History.
Science.	Local and Political Geography.	Physiology and Hygiene.	Elementary Science, or Mathematical and Physical Geography.
Didactics.	Elementary Work.	Principles and Methods of Teaching.	Principles and Methods of Teaching.
General Exercises.	Penmanship and Letter Writing.	State and County Government.	Constitution of the United States.

It is earnestly recommended that this course of study be supplemented by a course in general reading, including at least one book every year in each of the following subjects: History, travels, science, fiction, and didactics.

Where we have recommended elementary work, in didactics, Prof. S. N. Fellows, a member of the committee, and Professor of Didactics in the State University, suggests as a valuable little book for young teachers, "Mistakes in Teaching," by J. L. Hughes, published by Eldredge & Brothers, Philadelphia.

CLASSIFICATION.

Those now holding first grade certificates, and who also hold certificates of attendance at three or more former institutes, may be admitted to the third year's work, although it is desirable that they commence with a lower grade, to complete the course.

Those holding second grade certificates, and who also hold certificates of attendance at three or more former sessions, together with those holding first grade certificates, but who have attended only two former sessions, may be admitted to the second year's work.

All others should commence with the first year's work.

DAILY PROGRAMME OF STUDY AND RECITATION.

TIME.	FIRST YEAR.	SECOND YEAR.	THIRD YEAR.	FOURTH YEAR.
9:00 to 9:10	<i>Opening Exercises</i>			
9:10 to 9:50	Arithmetic. Study.	Reading. Study.	Study. Arithmetic.	Study. U. S. History.
9:50 to 10:30	<i>Recess</i>			
10:30 to 10:40	Reading. Study.	Arithmetic. Study.	Study. Analysis.	Study. Algebra.
10:40 to 11:20				
11:20 to 12:00	Geography. Study. Didactics.	Didactics. Study. Grammar.	Study. Physiology. Study.	Study. Didactics. Study.
1:30 to 2:00				
2:00 to 2:30				
2:30 to 3:00	<i>Recess</i>			
3:00 to 3:15	Study.	Study.	Didactics.	Science.
3:15 to 3:45				
3:45 to 4:15	<i>General Exercises</i>			

This programme is only suggestive and may be changed to suit each particular institute.

C. W. VON COELN, Des Moines,
S. N. FELLOWS, Iowa City,
H. H. FREER, Mt. Vernon,
W. J. SHOUP, Dubuque,
J. WERNLI, Le Mars,
Miss E. E. FRINK, Tipton,

} Committee.

DES MOINES, March 1881.

THE COUNTY SUPERINTENDENCY.

With our present system of district organization and finances, any backward step in regard to the office of the county superintendent would seriously impair and cripple our work, especially in the rural districts.

The action of the Nineteenth General Assembly in raising the minimum per diem to \$4, has given new energy and increased enthusiasm. The wisdom of the increase of salary will be seen, I think, in the continual improvement in the character and ability of the men who, in future, shall be elected to preside over the important school interests of the various counties.

TOWNSHIP ASSOCIATIONS.

These meetings constitute the most important and valuable work of county superintendents, in connection with the teachers of their respective counties. With very few exceptions, they are held in every county. They are well attended in the main, and are always with great interest and profit.

COUNTY SUPERINTENDENTS' CONVENTIONS.

The counties of the State have been grouped into eight sections, with reference to the convenience, by which a central place of meeting can be reached by railroads. During the past two years, sixteen conventions have been held. The attendance has been excellent, in most cases, the entire number of superintendents being present or accounted for as unavoidably detained. The programmes are carefully prepared, and the most vital and important topics connected with the duties of the county superintendent are thoroughly considered.

They are a means of unifying the work as to normal institutes, examination of teachers, grading and granting certificates, visitation of schools, and the hearing of appeals. They are not always confined to county superintendents. Many of our able and accomplished city superintendents and teachers have taken an active part.

EDUCATIONAL INSTITUTIONS.

It is not possible for the superintendent to visit the educational institutions of the State as thoroughly as could be desired.

Being officially connected with the State University, I have had opportunity to know something of the excellent character and stand-

ing of the institution. In common with most of our people, I have a just pride in its present prosperous condition and promise. I have noticed, with great satisfaction, the excellent behavior and manly bearing of students in all departments. The instruction is thorough, as is abundantly attested by the high standing of those who have gone out from the institution.

The faculty is composed of able and distinguished men, thoroughly devoted to their work, and ever watchful of the interests of the University.

The law and medical departments are practically self-supporting, and, with proper encouragement, will soon become a source of revenue to the State.

The appropriation by the Nineteenth General Assembly, for a new medical building, was well and judiciously expended. The rapid growth and development of the University demands a broad and liberal policy on the part of the State. I sincerely trust that as additional buildings are asked for, the means will be promptly voted to build them. Iowa is abundantly able to build up and maintain a university that shall compare favorably with the great University of Michigan. Such an institution necessarily exerts a vast influence for good upon the people. It is gratifying to know, as I do, that the institution is rapidly growing in favor with all classes, and so far as may be now known, there is no disposition to take a backward step.

It has always been, and is at present especially, economically and prudently conducted and managed. It is very fortunate in its beautiful location, and, as stated above, very highly favored in the worthy men who preside over it.

With such a beginning, what may we not hope for in future. I refer with pleasure to the able and comprehensive report of the board of regents, which accompanies this report.

I have had the pleasure to assist in the examination of the two graduating classes of the

STATE NORMAL SCHOOL.

I cannot speak in too high terms of the thoroughness of the work, of which every exercise gave abundant evidence.

Since its first organization this school has done much for the cause of normal instruction throughout the State.

The faculty are earnest and faithful laborers, and each and every

student who leaves the institution enters the work with an enthusiasm and earnestness which seldom fails of success. These teachers are everywhere in demand, and command the best salaries anywhere paid. The institution has been greatly cramped for room, and during the past two years has been unable to accommodate the large numbers that flocked to it. The last general assembly wisely appropriated money to build a much needed additional building, which has been completed in a manner very creditable to the board of trustees. The faculty will now be able to accommodate a much larger number of students, and in every way to raise the grade and standing of the institution.

The Agricultural College at Ames is in a prosperous condition and is doing a most excellent work.

I have visited this institution for the purpose of informing myself with regard to the results of technical instruction.

The thoroughness of the work and the proficiency of classes was specially gratifying.

The sciences are taught in connection with and by the aid of very complete apparatus.

The work of the institution in the departments of agriculture, horticulture and stock-raising was equally interesting.

Were it possible for the people of all classes to visit and become acquainted with this flourishing and vigorous school, it would be most heartily approved and sustained as one of the most valuable and necessary institutions of the State.

IOWA COLLEGE

at Grinnell, one of the oldest and most successful colleges of the State, was almost totally destroyed in the great tornado of June, 1882. Within one year new buildings, more beautiful, more substantial and commodious, with better equipments, have been erected upon the site of the old. Such a speedy resurrection to what will, no doubt, prove a brilliant career of increased usefulness and power, is a matter for which all friends of higher Christian education should be devoutly thankful.

In compliance with the statute, I herewith submit the first report of the

STATE BOARD OF EXAMINERS.

The board consists of the Superintendent of Public Instruction,

the President of the State University, the President of the State Normal School, together with Hon. John W. Rowley, of Van Buren county, and Mrs. Ellen M. Rich, of Benton county, the two latter having been appointed by the executive council.

The board was formally convened at Des Moines, on the 13th of October, 1882, at which time the following rules and regulations for the government of applicants agreed upon and published:

RULES FOR APPLICANTS.

1. Place upon each piece of paper passed to the person conducting the examination your number, as given you at the beginning of the examination—and *in no case* your name. Every paper must be written in ink.
2. Use only the paper furnished you, and write upon but one side of the same, and that the side with the ruled margin.
3. Read carefully the questions, and in case duplicate questions are presented under the same number, *select one*, as in no case will credit be given for both.
4. Place in the margin the number of questions answered, leaving the space of one line between your answers. Your answers need not be consecutive in the order of the questions, if you desire to answer first those which seem easiest to you, provided the number of the question answered be placed distinctly in the margin.
5. In all mathematical work let the full process appear, since more attention will be given to correct processes than to correct results, the answer being placed in the margin under the number. Paper will be furnished you for preliminary solutions, but let each solution be copied as soon as completed.
6. At the expiration of the time allotted for the subject, you will pass your paper promptly to the examiner without folding or creasing in any manner.
7. Ask no questions of examiners or others during the progress of the examination. Do not leave your seat until the close of the hour for examination.
8. Let all things be done decently and in order.

The first examination was held at Cedar Falls, beginning December 25, and closing December 27, 1882. Six applicants were present, and completed the examination, to three of whom certificates were issued, viz.: W. I. Benham, Manson, Iowa; Edgar T. Bedell, Applington, Iowa; Ernest R. Nichols, Charles City, Iowa.

A second examination was held at Des Moines and Burlington, on the 28th day of March, closing March 30, 1883. Eleven applicants were present, to four of whom certificates were granted, viz.: M. J.

Pusy, Winfield, Iowa; A. B. Carroll, Morning Sun, Iowa; Oscar McKim, Ft. Madison, Iowa; Nicholas Messer, Keokuk, Iowa.

Several applicants failed to complete this examination, while others did not reach the required standard in branches to which comparatively little attention is given in the great majority of our schools. I may name as among such branches, drawing and philosophy of education. It must not be inferred that the standing required was reached in all other branches.

In order to convey a correct idea of the character of the examination, I append hereto the rules for the government of the board, together with a complete list of questions used at the examination last named.

RULES FOR THE GOVERNMENT OF THE BOARD OF EXAMINERS.

1. Candidates for State certificates must have a general average of 85 per cent, and for diplomas a general average of 90 per cent shall be required upon all certificate branches, and 85 per cent upon all additional branches, provided that neither certificate nor diploma shall be granted when the candidate falls below 75 per cent in any of the following branches: Arithmetic, English Grammar, History of United States, Orthography and Geography; or below 65 per cent in any of the following: Reading, Writing, Book-keeping, Physiology, Algebra, Botany, Natural Philosophy, Drawing, Civil Government, Constitution and laws of Iowa, and Didactics; or below 60 per cent on any of the following: Geometry, Trigonometry, Chemistry, Zoology, Geology, Astronomy, Political Economy, Rhetoric, English Literature and General History.

2. Applicants must in all cases present a certificate of good moral character from the superintendent of the county in which they reside, and also from two other reputable citizens of the same county.

The following lists of questions were used at the Des Moines and Burlington examinations for certificates, March 28, 1883:

ORTHOGRAPHY.

TIME, FORTY MINUTES.

1. Put into proper shape as to punctuation, capitals and versification the following:

to be or not to be that is the question whether tis nobler in the mind to suffer the slings and arrows of outrageous fortune or to take arms against a sea of troubles and by opposing end them to die to sleep no more and by a

sleep to say we end the heart ache and the thousand natural shocks that flesh is heir to tis a consumation devoutly to be wished to die to sleep to sleep perchance to dream aye there's the rub for in that sleep of death what dreams may come when we have shuffled off this mortal coil

2. What rule in Orthography (or rules, if more than one) will apply to each of the following words: *Conferring, Chargeable, Robbed, Flies, Dying, Dyeing, Refusal, Immovable.*

3. What rules are violated in the following: *Truely, Monkies, Benefitted, Denyal.*

READING.

TIME, FORTY MINUTES.

1. What is the advantage of much practice in reading?
2. Mention three rules that should be observed in teaching reading to advanced classes.
3. What attention should be given to this subject in other than the reading lessons?
4. What are your methods of securing natural tones, and proper delivery?
5. Mention any rules that apply to inflection.
6. What is the design of punctuation?
7. How do you use the dictionary in connection with reading classes?
7. What constitutes a good reader?
8. What is your method of teaching beginners?
9. To what extent should supplementary or home reading be required of the pupil?
10. Do you ever require your pupils to commit to memory passages upon which they are to be exercised and drilled? If so, for what reason?

PENMANSHIP.

TIME, ONE HALF HOUR.

1. Form the principles of some system.
2. Form all the letters one space in height and mark the principles.
3. Form the letters two spaces in height, and the looped letters.
4. Illustrate the different *turns*.
4. Describe the position of the body, feet, arms, and pen-holding in writing.
6. Illustrate *slant* and tell the different *movements*.

7. Form all the capitals which require the *capital stem*, the *direct oval*, the *reversed oval*.
8. Give a method of *opening, conducting and closing* a writing class.
9. Give some reasons for preferring copy-books for pupil's use.
10. Tell why teacher should keep books and pens when class is not writing.

ARITHMETIC.

TIME, TWO HOURS.

1. Find the G. C. D. of 468 and 1768 by at least two processes, and demonstrate the process by division of the less into the greater.
2. State and demonstrate a rule for dividing one fraction by another.
3. Copy the following table. On the line with percentage, in the several columns, write the terms thereof. Opposite each of the other subjects in the first column, write under each term in percentage, the corresponding term of that subject:

Percentage.....						
Profit and Loss.....						
Commission.....						
Interest.....						
True Discount.....						
Bank Discount.....						
Stocks.....						
Insurance.....						
Exchange.....						

4. Which is the better investment, and how much, one of \$4,200, yielding \$168 semi-annually, or one of \$7,500 producing \$712.50 annually?
5. A and B are partners; A's stock is to B's as 4 to 5; after three months A withdraws two thirds of his and B three fourths of his; divide their year's gain, \$1,675.
6. Of two pieces of land, the one a circle of 17 rods in diameter, the other a triangle whose hypotenuse is 30 rods and whose base is 24 rods, which is the larger, and how much?
7. Write a full synopsis of Ratio and Proportion. Demonstrate the fundamental principle of Proportion.
8. Name and describe the principal units of the Metric system. Write the table for capacity. Explain the meaning of the prefixes used.

9. Explain the process of extracting the cube root by one of the two regular modes, indicating the adaption of it to class instruction. You can employ 91125 if you need a number which is a power.
10. Write the general formula for the value of S, Arithmetrical series, and demonstrate it.

GEOGRAPHY.

TIME, ONE HOUR.

1. Begin with Maine, and all the States and Territories bordering on the British possessions, and name capitals of each.
2. Locate Savannah, Glasgow, Tokio, Timbuctoo, Madras, Sitka, Santiago, and Vera Cruz.
3. Take a cargo from Natchez to Odessa, and name all the bodies of water over which you would pass.
4. Name the republics of Europe.
5. Locate the penitentiaries, asylums, reform schools and educational institutions in Iowa under State control.
6. Name all the railroads that traverse the State of Iowa from east to west, and the cities at both the eastern and western ends of each, in the State.
7. Trade winds. What are they, where are they, and how caused?
8. Where are the best anthracite coal fields in the United States? Where are the best lead deposits? Where are the best marble quarries?
9. Locate the great volcanic girdle of the world, and give the reason for the intense volcanic activity in the regions of the East and West Indies.
10. Name and locate the prominent mountain ranges of Europe.

GRAMMAR.

TIME, ONE HOUR.

1. Define Syntax, analysis, punctuation, diagram, modifier.
2. Write the possessive plural of the following words: *Man, he, it, house, Charles*.
3. Write a simple sentence containing not less than six different parts of speech.
4. Show by examples the difference between a complex and a compound sentence.
5. What is a dependent clause? Give three examples of dependent clauses.
6. Parse *this, which, and to accomplish* in the sentence: This is the work which I desire to accomplish.
7. Analyze or diagram the following sentence, and parse the words in italics: Photography is the art which enables *common-place* mediocrity to look like *genius*.

8. Correct in full the following expressions: "I haint had no dinner nor drunk no water for a week and haint saw a table sot as it had ought to be since we come here." "I was setting by the river when they telled me." "We broke up the setting hen and eat her eggs." "I knowed that it was so for I seen him when he done it." "These sort of expressions should be avoided." "A large number of seats were occupied by pupils that had no backs." "Try and recite the lesson perfectly." "Two men will be tried for crimes in this town which are punishable with death if a full court should attend."

9. Analyze or diagram the following:

"When thoughts
Of the last bitter hour come like a blight
Over thy spirit, and sad images
Of the stern agony and shroud and pall,
And breathless darkness and the narrow house,
Make thee to shudder, and grow sick at heart,—
Go forth under the open sky, and list
To nature's teaching."

10. In the above sentence, parse words: *when, list, house.*

BOOK-KEEPING.

TIME, ONE HOUR AND THIRTY MINUTES.

1. Define Single and Double entry.
2. What are representative accounts, and why are they so called?
2. Give rule for journalizing.
3. What is a Trial Balance, and for what is it intended?
4. Describe the manner of closing a Ledger.
5. Make a bill for the following goods and receipt it properly: Sold James McFarland 28 yards of prints at $16\frac{2}{3}$ cents; 85 lbs coffee sugar at $10\frac{1}{4}$ cents; 21 lbs "A" sugar at $12\frac{1}{2}$ cents; 16 lbs butter at 28 cents; 8 gals. maple sirup at 90 cents.
6. Write a negotiable note due in nine months.
7. What are speculative accounts? What is shown by debtor and credit sides?
8. What is the province of the journal, and how may it be dispensed with?
9. 10. Commenced business with cash on hand, \$6,000; Mdse., \$4,000; bills receivable, \$800; real estate, \$426; bank stock, \$800. I owe a note for \$1,846.13; on account, \$1,236.10.

At the close of the year I have cash, \$5,000; Mdse., \$3,462; bills receivable, \$900; real estate, \$400; bank stock, \$800; due on account, \$1,341.00. I owe on account, \$134.18; on notes, \$2,160. Make a balance account of opening and closing.

Ascertain whether there has been a gain or loss, and how much per cent.

PHYSIOLOGY.

TIME FORTY-FIVE MINUTES.

1. Describe the manner in which the bones are joined together.
2. Name and describe the different kinds of joints; give an example of each.
3. Give a full description of the vertebral column.
4. Explain the manner in which the character of the blood is changed in the lungs.
5. What habits impair the power of the lungs?
6. State what fluids or juices are secreted by the system for the digestion of the food, and give the particular use of each.
7. Describe the liver and state its function.
8. Locate the diaphragm, describe it and state its function.

HISTORY.

TIME, FORTY-FIVE MINUTES.

1. Who is Vice-President of the United States? Who is speaker of the House? Who is Chief Justice? Give the names of the President's Cabinet.
2. What was the Credit Mobilier? In what way did it affect American politics?
3. Which of the thirteen original colonies was largely settled by released prisoners for debt? Who was the author of that mode of settlement?
4. Where was Washington first inaugurated, and who administered the oath of office? Why was not the oath administered by the Chief Justice of the United States?
5. Name five important events in Andrew Jackson's administration.
6. With what foreign power did our country form the first treaty? Who was the American diplomatist?
7. Who was Owen Lovejoy? Narrate the circumstances of his death.
8. What led to the court-martial of General Fitz John Porter? What was the result of the trial?
9. In whose administration was the first Pacific railroad completed?
10. Explain the government land system in support of the public schools in many States of the Union.

ALGEBRA.

TIME, ONE HOUR AND THIRTY MINUTES.

1. A father's age is to that of his son, as the age of the latter is to that of the grandson. The eldest is 81 years of age, and the youngest is 16 years of age. What is the age of the son?

2. Divide the number 100 into four such parts that the first diminished by 5, the second increased by 5, and the third divided by 2, shall each equal the fourth.

3. Find by division the G. C. D. of $15a^4 + 10a^3b + 4a^2b^2 + b^4$, a^3b^3 and $6a^3 + 19a^2b + 8ab^2 - 5b^3$.

4. Separate the number A into two parts such that one part shall be M greater than the other. Deduce from the formula obtained an arithmetical rule for solution of such examples.

5. A person bought a quantity of cloth for \$6.75. After using four yards, he sold one-fourth of what remained at prime cost for \$1.00. How many yards did he buy?

6. Take factors out from under the radical sign in the following: $\sqrt{75}$, $3\sqrt{-128a^2b^3}$, $4\sqrt{-1250}$ and put under the radical sign the factors outside in the following: $\frac{1}{2}3\sqrt{-9}$, $2x24\sqrt{5x7}$, $\frac{1}{2}\sqrt{4n+2}$.

7. What is the price of oranges when eight more in a dollar's worth would lower the price five cents per dozen?

8. Solve:

$$(x+y) : (x-y) :: 4:1$$

$$(x+y) (x-y) = 64.$$

9. Four numbers are in geometrical progression, the smallest is seven, what is the largest if the sum of the four be 286?

10. Form an equation in quadratics whose root shall be eight and $-b$.

BOTANY.

TIME, FORTY-FIVE MINUTES.

1. Name the different ways in which leaves may be classified.
2. Define symmetrical flower, complete flower, essential organs, protecting organs.
3. Describe the manner in which plants obtain nutriment.
4. How are plants propagated or multiplied in numbers?
5. Describe the ovary, the ovule, the pistil.
6. Define classification. Tell how plants are classified.
7. What is a simple fruit? How are simple fruits classified?
9. Give a full description of an apple or a bean, tell the kind of fruit, and classify the plant which produces it.

NATURAL PHILOSOPHY.

TIME, ONE HOUR.

1. What is molecular force? Give examples of the different kinds.
2. Which travels the faster, sound at high pitch or sound at low pitch?
3. Show that perpetual motion is impossible.

4. The temperature of water at 60 degrees (Farh.) is reduced to 32 degrees; did it expand or contract? Explain.

5. Explain why the barometer falls when the thermometer rises, and vice versa.

6. Will a ship carry a heavier cargo in salt water or in fresh water? Why.

7. What is the solar spectrum? Upon what does the color of light depend?

8. Why does a receding object appear to become smaller?

9. What is the velocity of light, and how was it first ascertained?

10. Show the impenetrability of air, using the diving bell as an illustration.

DRAWING.

TIME, FORTY-FIVE MINUTES.

1. Develop a straight line and draw four pictures or designs upon it.
2. Develop curves, single and double, and draw four designs containing them and straight lines.
3. Draw five designs of fruit or vegetable.
4. Draw a hat, a knife, a basket, a book.
5. Develop the ellipse and draw three designs upon it.
6. Draw a square and fix diagonals; draw the square in perspective and show how to find the center.
7. Draw a figure and locate horizon line, vanishing point, point of sight, line of view, point of view, point of distance, and base line.
8. Draw three cubes in perspective below the horizon line, one directly on the line of view, one to the right and one to the left.
9. Locate three windows on the perspective side of a building—as a school-house.
10. What parts of a picture are shaded?

CIVIL GOVERNMENT.

TIME, ONE HOUR.

1. In case of a failure in the electoral college to choose a President and Vice-President, state fully by what bodies and by what vote each is chosen.
2. How may a bill become a law without the signature of the President.
3. Name five specified powers of Congress, and five specified powers prohibited to the States.
4. What is "the writ of habeas corpus," and when may its privileges be suspended?
5. State the two methods of proposing amendments to the Constitution of the United States.

6. State the difference between *original* and *appellate jurisdiction*.
7. Name the three powers of government, in what officers each is vested, and by whom and for what periods such officers are chosen.
8. Define an *ex post facto* law.
9. Distinction between *States* and *Territories*.
10. Nature of the *Missouri Compromise* and occasion of its repeal.

CONSTITUTION AND LAWS OF IOWA.

TIME, FORTY-FIVE MINUTES.

1. What is the title of the presiding officer of the Senate? How is he chosen?
2. What is the title of the presiding officer of the House? How is he chosen?
3. What restriction does the Constitution make regarding duelling?
4. Give the names of the State officers, and the office that each fills.
5. Can private property be taken for public use without compensation? Explain.
6. What record must the journal of each House show on the final passage of a bill?
7. When does a law passed by the General Assembly take effect?
8. Does the State give pecuniary aid to county Agricultural Societies? Explain.
9. In what respect do the functions of the District Courts differ from those of the Circuit Courts?
10. How can the Constitution be amended? Give the process.

FOR CERTIFICATES.

DIDACTICS—THEORY OF EDUCATION.

TIME, ONE HOUR AND THIRTY MINUTES.

1. Describe the conditions and qualities of a person educated up to your ideal standard.
2. Enumerate the forces or agencies that mould and educate the human being.
3. Which division of education belongs particularly to the schools? Give your reasons.
4. Write a few lines concisely explaining and defining teaching.
5. What is knowledge? Give an extended answer.

6. In what way does memory differ from knowing? In what divisions of knowledge does simple memory constitute complete knowing?
7. What conditions in the intellect and feelings of a pupil favoring his efforts to acquire knowledge should you induce and maintain during study and recitation?
8. What is the meaning and application of the term "method" as used by writers on Didactics?
9. Discuss the two distinctive methods of intellectual movement by which the learner acquires knowledge.
10. What are the conditions upon which good government for any school can be secured?

FOR CERTIFICATES.

DIDACTICS—PRACTICE.

TIME, ONE HOUR.

1. Describe what your pupils should be able to do in Reading on the completion of the Second Reader? Of the Third Reader? Of the Fourth Reader? Of the Fifth Reader?
2. What results should be reached in number lessons at the end of the first year?
3. Explain your treatment of fractions when teaching pupils just entering upon this subject.
4. Discuss the principle called self-activity in pupils. When is it violated and when maintained?
5. What principles underlie the art of questioning?
6. Indicate the development by inductive teaching of some rule in arithmetic, as that of "pointing off" in multiplication of decimals.
7. What faculties does a well devised system of Object Lessons tend to development and discipline?
8. Describe the features of a well-conducted recitation in Geography, Grammar grade.
9. What are the names of the usual grades in a city school system? Indicate the work in Arithmetic to be done in each grade.
10. What elements in the character and policy of the teacher will produce good government?

The fee for a State certificate is three dollars, and the holder is authorized to teach in any of the public schools of the State for a term of five years. The law requires that in case applicants fail to receive diplomas or certificates one half of the fee required shall be returned.

FINANCIAL REPORT.

No. of applicants.....	17
Fees collected from applicants for certificates.....	\$51.00
Fees returned,.....	15.00
Amount on hand and paid over to State treasurer.....	\$36.00

The number of applicants has not been as large as was expected, and yet it is equal to that of other States for the first year after the organization of similar boards.

Many of our teachers are reviewing and preparing for the next examination, which will be held in Davenport the coming month of August.

Before closing this report I desire to call attention to the apparent deficits of the various school funds for the year 1882. I do not think it at all probable that this is an actual shortage. It arises, no doubt, from the practice of borrowing from one fund in favor of another, which, in many cases, swells the receipts beyond what they really are. It may also be accounted for in part by carelessness and inefficiency of school officers, and furnishes a strong argument in favor of a consolidation of funds. It should also be stated that county superintendents are required to copy the original reports of secretaries and treasurers in reporting to this department. The item, "Paid for other purposes," is frequently erroneously reported as "Amount on hand." Wherever this mistake was made for the year 1881 it goes to swell the apparent deficit of the present report.

With the utmost faith in the future growth and efficiency of our schools, and yet with a keen sense of the imperfections of our laws, which I trust will be speedily remedied, this report is most respectfully submitted.

J. W. AKERS,
Superintendent Public Instruction.

ESSAYS UPON EDUCATIONAL QUESTIONS.

COUNTY HIGH SCHOOL.

BY PROF. R. D. JONES, OF GUTHRIE COUNTY HIGH SCHOOL.

"This system of high schools * * * is the identical plan recommended by the immortal Jefferson to the legislature of Virginia, the next year after he wrote the Declaration of Independence.

"Iowa, then the possession of a foreign prince, afterward annexed to the United States by his far-seeing policy, was first to adopt his statesman-like system of public instruction."

The foregoing statement we find in the report for 1858, made by the Hon. Maturin L. Fisher, then State Superintendent of Public Instruction.

It is interesting to note that the conception of the county high school system originated in the fertile brain of that man of ideas, Thomas Jefferson, he who meditated upon the sources of law, and the origin of liberty, and was proficient upon the violin; who pondered on profound problems of political science; and, when Minister Plenipotentiary to France, sent seed, and shrubs and plants to the farmers of America; who drafted with equal ease a Declaration of Independence, and a model mould-board for an improved plow; who was the founder of the Democratic party, as well as of schools and colleges. Truly he was a man of versatile and remarkable talents!

How extensively this county high school system of Jefferson has been established in other States, I have no means of ascertaining. In Iowa a law was passed March 12, 1858, authorizing the establishment of county high schools, and providing certain aid by the State. This law was repealed December 28, of the same year. During the short period in which it was in force a county high school was established at Albion, Marshall county, but the law under which it was established